



WIND ENERGY “MADE IN NAMIBIA”

Münster, 19th of March 2022

1. ABOUT WINDWISE

2. ROUND TABLE SUMMARY

3. PLAN FOR NAMIBIA

4. SUMMARY + DEMAND

1. ABOUT WINDWISE

HISTORY AND EXPERIENCE



KENERSYS



1989

Today



The WINDWISE team - more than 300 years of cumulated experience in the wind industry

- Design + development of multi-MW wind turbines and components
- Industrialization: set-up of manufacturing facilities, supply chain and quality assurance
- Technical operation of the wind turbines
- Project development: from site identification to turn-key solutions
- Ownership of IP for multi-MW wind turbine generator (WTG)

WINDWISE IS WILLING TO SHARE 100% OF KNOW-HOW AND WTG IP

1. ABOUT WINDWISE

REFERENCES PRODUCTION SET-UP

Complete construction and site management



Tacke Energia/ GE Wind Noblejas (Spain)



Kenersys Europe, Wismar (Germany)

Planning and construction support



GE Wind Shenyang (China)



Kenersys India, Baramati (India)

WORLD-WIDE REFERENCES FOR SET-UP OF PRODUCTION FACILITIES

2. ROUND TABLE SUMMARY

HIGH-LEVEL TARGETS

WINDWISE'S TAKE-AWAY OUT OF ROUND TABLE DISCUSSION

Namibia looks for:

- Stand alone systems – rural electrification
- Local content
- Plan to integrate the local companies
- University programs
- Market introduction projects

Further needs – identified since project start:

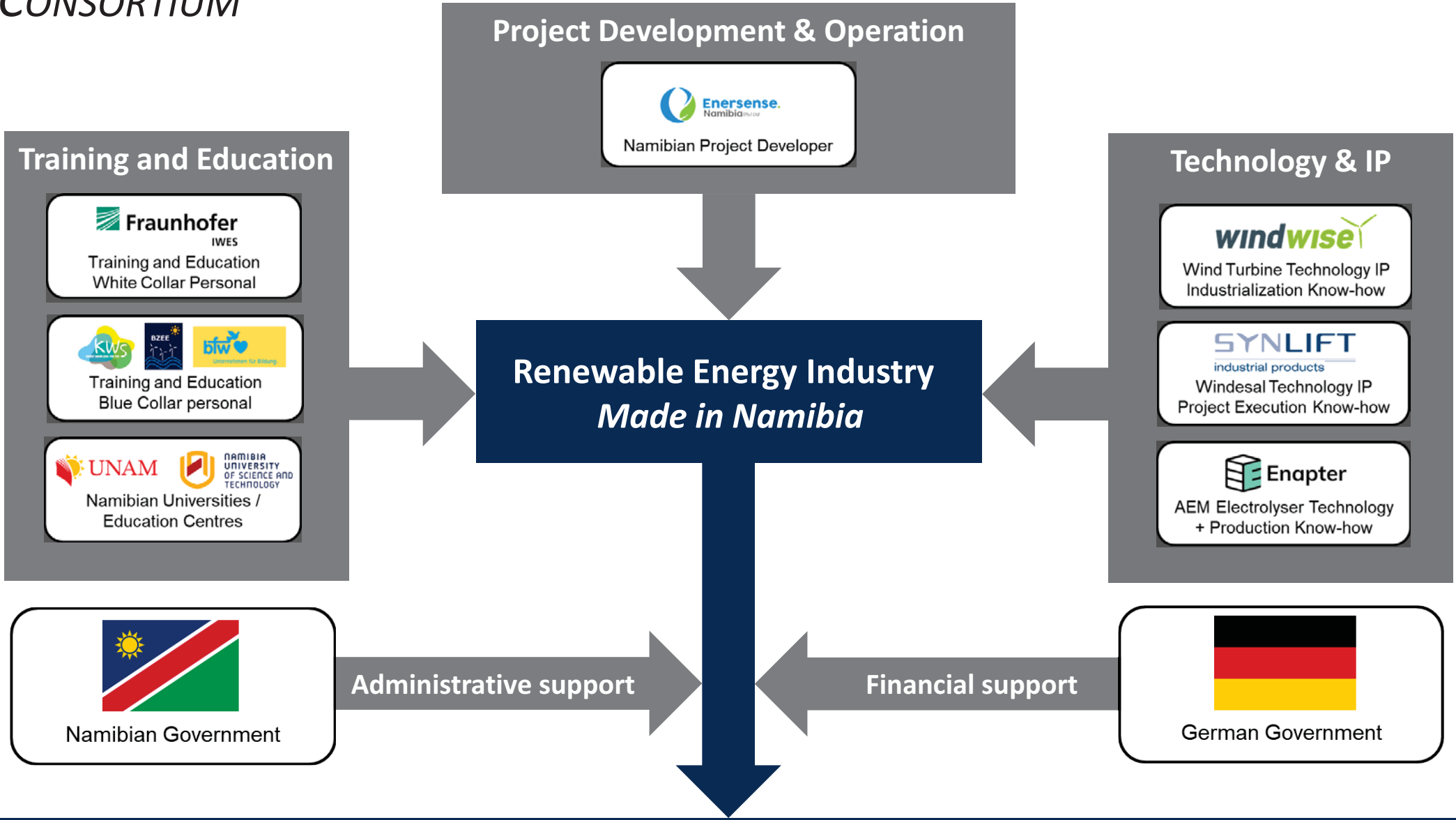
- Water desalination technology
- Pilot projects for hydrogen generation
- Promotion of female students



WHAT IS NEEDED? TECHNOLOGY AND EDUCATED STAFF!

3. PLAN FOR NAMIBIA

CONSORTIUM



GENERATION OF NAMIBIAN JOBS AND VALUE CHAIN

3. PLAN FOR NAMIBIA

ROAD MAP PROPOSAL WINDWISE



EDUCATION FOR TECHNICIANS AND ENGINEERS AS FUTURE NAMIBIAN MANAGEMENT

Blue & White Collar: Supporting of the local vocational training & education infrastructure (Namibia)

Blue Collar Technicians
Training (Germany)

White Collar Engineers (Online & Germany)

Test Bench
WTG in islanding grid

2022

2023

2024

2025

Project: WTGs + Hydrolysis

Project: WTG + desalination

Workshop set-up
and production start

PROJECTS + INDUSTRIALIZATION

4. SUMMARY + DEMAND

BROAD CONSORTIUM COMPILED

- Politics
- Technology providers **with willingness to transfer IP**
- Local project developers
- Namibian and German training and R&D institutes



NEXT STEPS AND FINANCIAL DEMAND :

- Training activities (50 students & technicians (female, male) over 2 years): 3 Mio Euro
- 2 x WTG (12 Mio Euro), electrolysis (4 Mio Euro), fuel-cell/ gas turbine (2 Mio Euro): 18 Mio Euro
- 1 x Windturbine (6 Mio Euro) plus desalination plant (19 Mio Euro): 25 Mio Euro
- Workshop, administration building and outdoor storage: 13 Mio Euro

**WINDWISE KNOW-HOW + BMZ SUPPORT FOR NAMIBIA
GENERATION OF LOCAL VALUE AND CARBON-FREE INDUSTRY**



MANY THANKS FOR YOUR ATTENTION

WINDWISE GmbH

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